

ABSTRACT OF THE DISCLOSURE

A process for producing plastic/wood fiber composite foamed structures includes the steps of pre-drying wood fiber filler; mixing it with plastic to form a mixture;

5 feeding the mixture into an extruder; introducing and mixing a blowing agent; subject the mixture to high shear forces and extruding the mixture to produce a plastic/wood fiber composite foamed structure. The filler has a degradation temperature and an active volatization temperature. During the pre-drying step the temperature is maintained below the degradation temperature. During the mixing step the mixing

10 temperature is maintained below the active volatilizing temperature. During the introducing and mixing step a blowing agent is introduced into the plastic/wood fiber mixture and is mixed therewith to produce a plastic/wood fiber/gas mixture. During the subjecting step the plastic/wood fiber/gas mixture is subjected to high shear forces in the presence of high pressures and the temperature is maintained below an active

15 volatilizing temperature.